

THE EFFECT OF INTERIOR DESIGN ELEMENTS ON CUSTOMER EXPERIENCE IN FASHION RETAIL STORES

تأثير عناصر العمارة الداخلية على تجربة المستخدم بمتاجر الأزياء

Reem Hesham Omar

Décor Department, Faculty of Fine Arts, Helwan University, Egypt

ريم هشام عمر

قسم الديكور – كلية الفنون الجميلة – جامعة حلوان

reemhesham@f-arts.helwan.edu.eg

ABSTRACT

Retail stores compete in attracting customers to their retail stores and always develop approaches that aim to provide better shopping experience. Interior design as part of the retail store identity is an essential part of the process in understanding customers' perceptions, needs, and behavior to help interior designers take better decisions when designing a retail store using elements of interior design by making the environment more appealing to customers. These elements include space, circulation, light, and color. The main objective of the research is to understand the relationship between customer behavior and interior design elements and to identify the most influential elements of interior design on customer experience, and to evaluate the interior design impact on customers. A programmed questionnaire has been conducted on random customers including questions with different measurements. The study results show the significance of the design process and its impact on the retail environment, and prioritizing elements that have the most influence on customers' experience.

KEYWORDS

Retail Stores; Customer Experience; Interior Design Elements

المخلص

تتنافس المحال التجارية فيما بينها في جذب العملاء ودائمًا ما تعمل تلك المحال على تطوير أساليب تهدف إلى توفير تجربة تسوق أفضل وبالتبعية إنفاق أكثر. كما يحتفظ التصميم الداخلي لتلك المحال بجزء أساسي من عمليات التطوير، حيث يتم رصد وتحليل سلوك العملاء واحتياجاتهم والذي بالتبعية يساعد المصممين على اتخاذ قرارات أفضل عند الشروع في عمليات التصميم الداخلي لتلك المحال عن طريق جعل البيئة أكثر جاذبية للعملاء. وتتضمن هذه العناصر دراسة الساحة والحركة داخل تلك المحال وتوزيع ونوعية الإضاءة واختيارات الالوان وعلاقتها بالتأثير النفسي على العملاء. تهدف الدراسة الى فهم العلاقة بين سلوك العميل وعناصر التصميم الداخلي في متاجر البيع بالتجزئة وتحديد العناصر الأكثر تأثيرًا للتصميم الداخلي على تجربة العميل، بالإضافة لتقييم تأثير التصميم الداخلي على العملاء. تم إجراء استبيان على عملاء عشوائيين بما في ذلك أسئلة بقياسات مختلفة. وتظهر نتائج الدراسة أهمية عملية التصميم وتأثيرها الكبير على سلوك العملاء داخل تلك المحال، بالإضافة الى تحديد أولويات العناصر التي لها تأثير أكبر من غيرها على تجربة العملاء.

الكلمات المفتاحية

المحال التجارية؛ تجربة المستخدم؛ عناصر التصميم الداخلي

1. INTRODUCTION

Customers' behavior in retail stores could be affected by various influencing factors like affecting their perception. As shops use psychology to influence buying decisions (Singh, P., Katiyar N., Verma G., 2014) whether in buying clothes, gadgets, or other types of items. Retailers not only try to attract customers to their shops but also target the increase of unplanned spending (Nicasio F., 2021). They usually use different ways to make the customer spend more time in the shop like changing items' location in a store as to make the customer wander around to search for the things he needs which lead him to spend more time in the store and increase the unplanned spending items.

Retailers usually try different techniques to trigger impulse buying and attract customers and increase the profits of retailers using different approaches, among these approaches comes the interior design of the retail store. It is always being asked by stakeholders and retailers, what can make customers feel comfortable, happy and take decisions to buy easily.

Considering interior design as part of the experience, it is a diverse job that involves applying both technical and artistic solutions inside a retail setting. The design solutions enhance the quality of the retail experience for customers, staff, and management. They are practical and aesthetically pleasing (Al-Fran, 2019, Lfta and Kazem, 2019).

An interior setting, like a retail space, is thought of being the background where a retailer may showcase their own brand identity and mainly their products. Therefore, the interior designer works to create a space to reflect the brand of the retailer as well as improve user experience by connecting an interior environment to the retailer's objectives.

1.1 The Role of Interior Design

Interior design is also known as a science that focuses on the examination and analysis of architectural spaces and spaces that make up the internal elements of numerous environments that are being designed and created. The interior designer does this by coming up with a variety of solutions and recommendations that can be used both practically and scientifically and that support and enhance interior space aesthetic and performance in a way that has a creative flair (Abu Zaarour, 2013).

1.2 Commercial Environments

Commercial environments are those spaces that are created through the application of a particular set of elements, determinants, and conditions that are organized in a particular way based on analysis, study, and a correct understanding of the needs and requirements of people from sellers and customers coming to buy. These elements are applied within a space of a particular type of business environment. (Abdel-Tawab et al., 2021).

The objective of retail design is to construct a place that anticipates and reflects the unique demands and desires of customers. Customers' feelings and desires can be awoken through design, which can then affect their purchasing decisions. Design is another strategy that can be used to differentiate one store from all the others. As Fitch (1990) remarked, "only one store can be the cheapest, the others have to use design".

With all these marketing strategies This research will focus on knowing to which extent the interior design of the retail stores is one of the factors that affect the decision of the customers to choose which store to go to, and which interior design elements are most influencing on the customer.

There are different types of fashion retail stores which differs according to the type of cloth brand, as these types are specialty stores, Boutique, Chain stores, Designer stores.

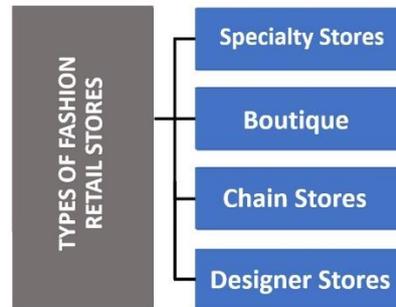


Figure 1: Types of fashion retail stores. (Source: Author)

1.3 Customer Behavior

Customer behavior is defined as the way in which a person interacts with his or her surroundings, whether acting alone or in a group, and expresses how that person feels about that environment considering the circumstances and elements that directly influence that person's behavior (Fahmy and Abd Rich, 2015).

Consumer behavior in retail stores also can be defined as the study of what motivates people and organizations to buy goods and support particular brands. The primary areas of research in this field include psychology, behavior, and motivations.

- Psychological aspects: A person's response to an advertisement is greatly influenced by their own views, attitudes, and overall worldview.
- Personal factors: Demographics of the target audience, such as age, culture, career, and background, significantly influence the interests and opinions of consumers.
- Social aspects: A person's social networks influence their shopping habits. Their purchasing decisions are influenced by their money, education, and social class.

2. RESEARCH PROBLEM

Due to limited research into studying the role of interior designers in customer experience in retail stores from a design approach as well as the lack of reliable literature in the same research area, this leaves a fundamental topic in the field of interior design unexplored and undisclosed.

This means that retailers are unable to take full advantage of the benefits associated with the successful design of the retail store and thereby face the possibility of a negative effect on their potential earnings.

3. RESEARCH OBJECTIVES

The paper aims to observe the significance and impact of the interior design on the customer behavior and experience in retail stores, in addition to considering the interaction between the interior design elements and the customer behavior, and finally to explore potential interior design solutions that shall provide better quality and improving overall customer experience in retail store.

The research paper aims to:

- Understand the relationship between customer behavior and interior design elements in retail store.
- Analyze the influence of interior design on customer behavior according to the difference in gender.
- Identify which elements have more influence on customer experience in retail stores.

4. LITERATURE REVIEW

As interior design elements shape the interior space it also has a unique influence of user's perception of any interior space. In retail stores, it is crucial to identify factors that have a significant effect on customer behavior and perception of the retail store.

4.1 Customer Perception of Space

Designing the retail store interior space is a critical process for interior designer as the proposed vision set for the design will lead to psychological effect of interior design on customer subconscious.

The built environment of an interior space affects and influences the customer experience and contribute to increase owners' revenue by giving the customer a better experience than competitors, while designing a retail store interior designer should focus on what makes the customer journey in the store feels more comfortable and easier and in contrast, interior designers should mitigate factors that may increase anxiety, discomfort, and stress. Which if exists, it will affect negatively on the customer experience and decrease customer retention. (Singh, P., Katiyar N., Verma G., 2014)

4.2 Psychological Comfort

The psychological comfort of a customer in a retail store could be classified to three main comfort aspects which are thermal comfort, acoustics, and visual comfort, in a retail store should provide adequate thermal, acoustic comfort, humidity, and indoor air quality which are essential for any shopping experience. As a result, such elements neither should be traded with any other aspect nor being subject to assessment in this research.

4.3 Circulation

Customer behavior is the pattern in which a customer navigates a retail store and interacts with the products, many people follow the same pattern of circulation in a retail store, according to studies (Wendy L., 1990) 90% of customers will turn right after entering a retail store. Most customers don't want to go to spaces that lead to bumping with others.

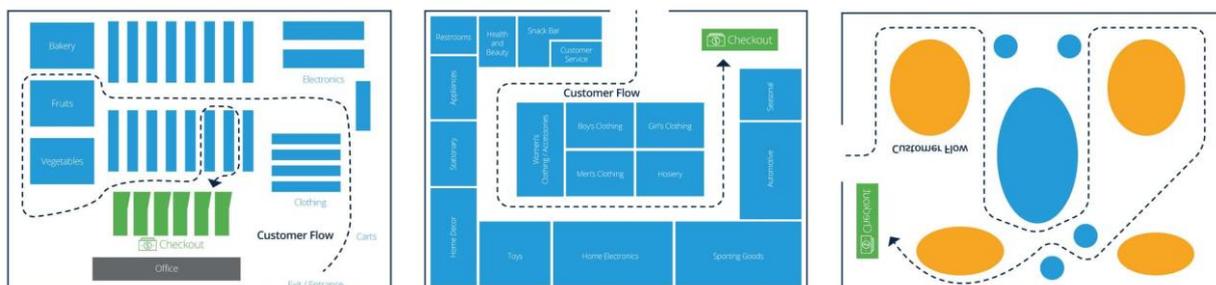


Figure 2: Preferred circulation where customers tend to turn right after entering a retail store.

(Source: <https://www.smartsheet.com/store-layout>)

The circulation in a retail store should be guiding and leading the customer to see all the products displayed in a retail store with a certain path to be as a guided tour, to achieve better control over the customers and a better chance to influence buying decisions (Singh P., 2014).

4.4 Lighting Design

Lighting design has an important implication for customer behavior and is an important aspect of consideration for the retail industry as it could affect the perception of a customer in his shopping experience. As light affects two main aspects, the first aspect is the function where it is the visibility and visual comfort, the second aspect is customers feel when they are in a retail store environment reflecting on their impressions, emotions, mood, and cognition. (Katelijn Q. , Koenraad Van C. , Erik Nuyts, 2009)

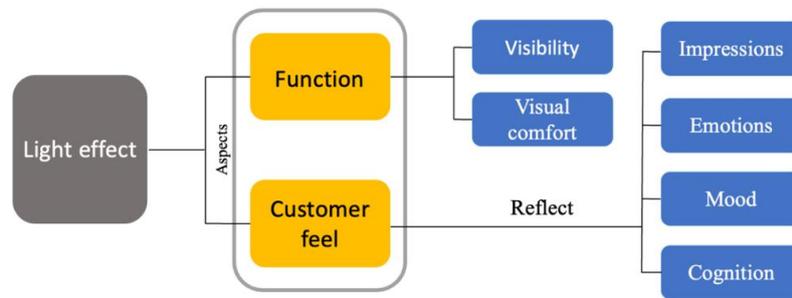


Figure 3: Light design affects two main aspects in a retail store. (Source: Author)

Lighting setup and design can play an important role in retail spaces and product presentation. According to (Schierz, 2001). It could affect store image and store atmospherics and has a huge impact on subjective impressions of the product such as Freshness, Pleasantness, and Attractiveness.

Lighting can produce atmospheres that can be used as mood enhancers, perceptions, and consumer performance that impact the retail environment, according to a study conducted in 2006 by retail design specialists (Knez, I., 2001) The amount of time consumers spends in front of displays, how much they interact with things, and how many purchases they make could all be affected by lighting.

According to The illuminating Engineering Society of North America (IESNA), Retail lighting is an important part of branding and marketing criteria if it's created in a successful way in the retail store as it influences and creates excitement in the store, as the role of lighting is to render the products in an attractive way without changing any characteristics of the product like in the shopping stores light shouldn't change any clothes color to allow the customer to examine the products in order to make the decision of buying. (Quartier, K., Christiaans, H., 2007).

Light design in retail stores can be described in terms of the following characteristics: Brightness, Correlated Color temperature, Spatial Light Distribution.

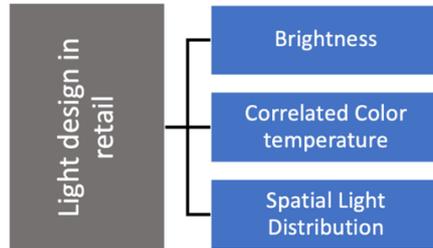


Figure 4: Characteristics that describe the light design in a retail store. (Source: Author)

Brightness. The perception of brightness is a function of so many different factors such as object luminance, size, gradient, surrounding luminance, the adaptation of the eye, and spectral composition (DiLaura et. al., 2011). As luminance can be defined as the brightness of a product caused by the luminaire. This brightness affects the perception of the customer towards products which can affect his experience in positive or negative way. Retail stores seek to provide the best luminance balance that benefits their products in a positive way that encourage customers to buy. Another factor that is correlated to brightness and luminance is the color rendering index (CRI) which is quantitative measure of the ability of a light source to reveal the colors of various objects faithfully in comparison with a natural or standard light source. This factor is considered a role player when selecting luminaires in retail stores as CRI is measured on a score from 0 – 100 where Ra 100 is best at representing the true color of the items.



Figure 5: Difference between color render index scores (Ra 95 vs Ra 80) on rendering real colors of products. (Source: yeelight.com)

Correlated color temperature (CCT) can be defined as “the absolute temperature a blackbody has when it has the same color appearance at the source and is measured in Kelvin (k)” (DiLaura et. al., 2011). CCTs relate the perceptible warm colors with low temperatures and perceptible cool colors with high temperatures. Warm white light is generally set below 3000K, while cool white light is set above 5000K.



Figure 6: CCT range and effect. (Source: elcolighting.com)

According to (Lechner, 2009), Selection of retail stores lighting varies as warmer colors are preferred when illumination levels are low, while cooler colors are preferred at high light levels and in hot climates

Spatial light distribution refers to the way light is distributed from a light source. It can affect the distribution of light in a space, which can be described as uniform or non-uniform. Spatial distribution is composed of two aspects:

- The distribution or pattern of the light
- The location of the light source.

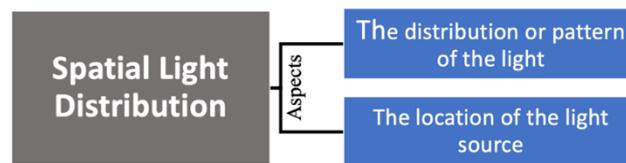


Figure 7: Aspects of composed spatial distribution. (Source: Author)

A uniform light effect in a space is achieved when the whole space is illuminated evenly.

The quantity of luminaires, their placement, and the direction in which the light is emitted can all affect the desired outcome (whether it be uniform or non-uniform).

The direction of the light, which is determined by the angle from which the luminaire emits light, is crucial since it can have a variety of impacts. While diffused light creates shadows with softer edges, directional light creates edges that are clearly defined. Therefore, something can be highlighted and given more focus by using directional lighting. Despite having the same illuminance, diffuse lighting is perceived as being less bright than directional lighting. (Boyce 2012).



Figure 8: Diffused and ambient light distribution (source: Commercial Lighting Industries)



Figure 9: Non-uniform lighting distribution in retail interiors. (source: Urban Cottage Industries)

To create effective lighting in a retail space, the lighting design process should begin at early stages in the project. This will enable the designer to establish the right contrast between the products, displays, and backgrounds, as well as to choose the locations of accent luminaires with the best aiming angles with the products. This will help the customer see the products clearly during the shopping experience, which will affect how he perceives them. (DiLaura, Houser, Mistic, Steffy, 2011).

4.5 Color

One of the main aspects of retail store interior design that affect customer experience is colors inside a retail store, as colors affect customers' first impressions and sometimes lead to form an

initial decision whether this shop would be appealing to explore or not. Color also affect the time they will spend in this store as the customer won't return to the store if they don't like the aesthetics and overall color and mood.

Color enhance the atmosphere and environment in retail stores based on their target customer, as different age groups tend to prefer different color palettes which clearly reflects that color as an element is strongly connected to other interior design elements.

Colors in retail stores affect the brand and product in an indirect way, as color increases brand recognition (by up to 80%) according to (Kaya, N., 2017) as color boosts memory by adding an extra stimulus for the brain in identifying the store.

Using Red color creates urgency and energy which is why it's used for clearance and sales, while yellow color optimistic and youthful which often used in shop windows to grab customer attention, Blue color usually calms the body, thus it's used in elements related to security and trust, Green color is one of the easiest colors for the eye to process which used in certain areas in retail stores to create calm. (Kuehni, R.G.,2005)

Black color affects the customer to feel powerful that's why it's often used in retail stores for luxury products, while pink color affects customer to feel romantic and feminine which usually used to market products for females, And Orange lead the customer to aggressive used in retail stores to control the customer feelings to speed up processes (Söker, B.S.,2009).

Color affects customers' emotions in a retail store interior design as it affects how they respond, but customers with different cultures and past experiences can make differences in thoughts and emotions about certain colors that affect their feelings.

Although color is strongly linked with the identity of brands and for that, identity should be reflected on the interior design for its stores. However, it is crucial for interior designer to create a balance between expressing the identity of a brand and provide appealing shopping experience in the store as well.



Figure 10: Same retail store with different colors, on the left a warm color store, in the middle a cool color store, on the right a neutral color store. (source: Kaya, N., 2017)

5. METHODS

Within the scope of this research, the study used a questionnaire form as a data collection tool utilizing a five-point Likert Scale to measure all the variables.

A questionnaire was coded into eleven questions which was used to collect and evaluate the significance and effect of interior design on users' experience in during shopping in retail stores - fashion stores in particular-. Afterwards, Analysis and conclusions will be carried out about which element of interior design affect the most on their shopping experience. The questionnaire is documented in Annex 1.

The Scale starts from 1 to 5, 1 means that the element of interior design has low or poor effect on his shopping experience. The questionnaire questions include four questions with different measuring method which is showing two pictures for different design solution for the same element and ask the customer which picture he prefers with choices (Store A, Store B, no effect). It was considered to hide the store brand/name to reduce any bias that might happen towards certain brand while showing the customers the stores pictures to evaluate the interior design of the store not the brand itself.

Universal design as well which includes designing environments and products that are more easily accessed and used by a spectrum of people without specialized adaptations is considered while designing the questionnaire.

A total of 55 customers responded to the questionnaire with their perceptions which is considered as a sample of the community.

Customer responded to the questionnaire was based on their experience when they shop in a fashion store, and how they feel during seeing the products, choosing which item fits them, their decision in choosing the store they want to shop in, and the influence of each element of interior design in their shopping experience.

And the questionnaire questions where set to evaluate specific items in a simple way then the author will connect it to the know the perception of interior design elements in fashion retail store.

Table 1: Questionnaire structure & responses (source : author)

Influencing Factors	Question	Likert Scale (Responses)				
		Very Low	Low	Neutral	High	Very High
Interior Design	<i>To which extent does the interior design of a fashion store affect your overall shopping experience?</i>	0	1	11	22	21
	<i>If two stores are selling the same product, does the overall look and feel of the store (interior design) affects your choice to pick one on top of the other?</i>	Not Likely	Less Likely	Neutral	Likely	More Likely
Circulation and Display positions	<i>To which extent does the circulation and display positions inside a fashion store affects your shopping experience?</i>	Poor	Fair	Neutral	V. Good	Strong
		0	0	11	25	19
Floor design	<i>Did you notice the flooring design of a store you enter?</i>	Not Noticeable	Fair	Neutral	Noticeable	V. Noticeable
		3	5	15	15	17
Ceiling design	<i>Which floor design would affect your shopping experience positively?</i>	Store A	Store B	Floor design has no effect on my experience		
		7	46	2		
Light design	<i>To which extent does the ceiling design affect your shopping perception of a store?</i>	Very Low	Low	Neutral	High	Very High
		4	10	27	9	5
Light design	<i>Which ceiling design would affect your shopping experience positively?</i>	Store A	Store B	Ceiling design has no effect on my experience		
		31	15	9		
Light design	<i>To which extent does the light design affect your shopping perception of the store during the shopping?</i>	Poor	Fair	Neutral	V. Good	Strong
		1	1	8	14	31

	<i>Which light design do you prefer in a fashion store?</i>	Store A		Store B		None
		48		7		0
Colors	<i>Does colors of a store affect your shopping experience?</i>	Very Low	Low	Neutral	High	Very High
		1	1	19	19	15
	<i>Which color mood do you prefer during your shopping in a fashion store?</i>	Store A		Store B		None
		37		18		0

6. RESULTS

The questionnaire starts by asking the customers about their gender to study if there will be an influence of gender on the perception of interior design in fashion stores between females and males.

The questionnaire was sent to an equal number of customers from different genders, according to the responses there were 74.5% responses from female customers while 25.5% responses from male customers, which initially indicates the interest of female participants in shopping and related experiences.

According to the previous studies (Haiyan H. et al., 2018) that interviews different gender about their enjoyment of shopping, proved that over half of the female respondents (51%) claimed that they enjoy their shopping, proved that over half of the female respondents (51%) claimed that they enjoy their shopping, whereas only a third of male respondents (34%) said that they enjoy shopping.

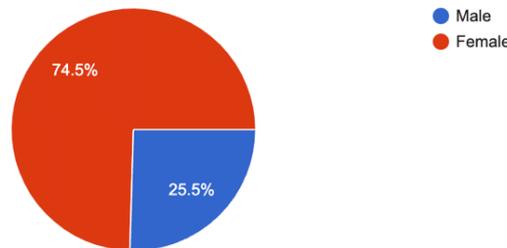


Figure 11: Customers' gender percentiles. (Source: author)

And according to the results and questionnaire answers, it's obvious that males have no significant tendency toward specific preferences on the effect of interior design elements on their shopping experience.

Questionnaire overview

Then customers were asked two questions about the effect of interior design in fashion stores on their perception and if this affects their choice, and the rest of the questions were measuring specific interior design elements that affect their perception and the shopping experience in retail stores which are circulation, space which translated in the floor, wall, and ceiling, ending the questionnaire by measuring the effect of light and color on customer experience.

Overall experience

According to the customer's responses (78.2%), customers see that interior design in fashion stores has a significant effect on their overall shopping experience, while (21.8%) of customers see that interior design has little to no effect on their perception. This result reflects interior design's importance on customer perception to enjoy and spend more time shopping in retail stores.

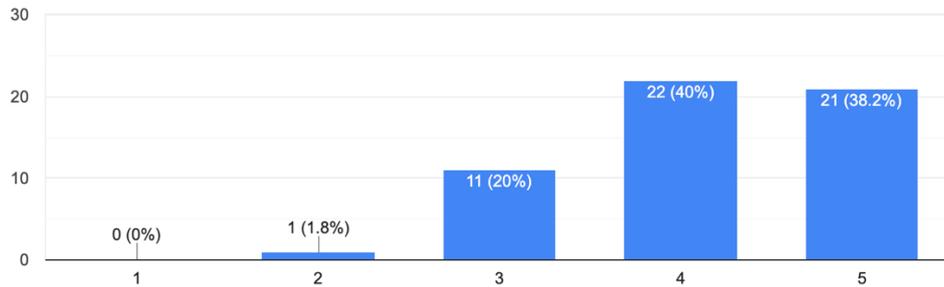


Figure 12: Customers' responses on the overall experience in the retail store. (Source: author)

Customer tendency to prefer a store over another selling the same product

Almost two-thirds of the customers see that interior design and the overall look and feel of the store affect their choice, As (61.9%) of customers responded that its more likely that interior design will affect their choice, while (32.7%) of customers see that its neutral effect on their choice, and (5.5%) customer respond that it's not likely to affect their choice.

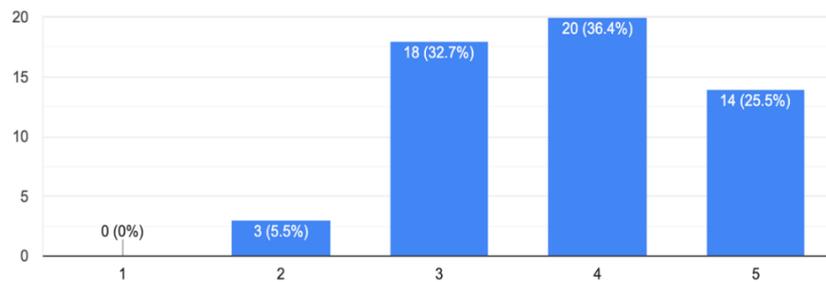


Figure 13: Customers' responses on preferring a store over another selling the same product. (Source: author)

Circulation

Considering circulation and display positions inside a fashion store's effect on the customer shopping experience, 80% of the replies stated that it has a strong effect on their shopping experience, while (20%) felt neutral about circulation affecting their experience. This shows that circulation and display positions significantly affect customer perception with a slight difference between each customer.

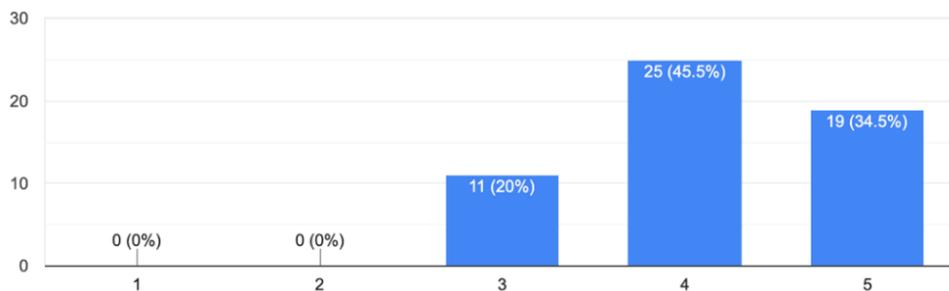


Figure 14: Customers' responses on the effect of the circulation and display positions in fashion store a store over another selling the same product. (Source: author)

Floor Design

According to questionnaire responses, about 42% didn't notice the flooring design in a fashion store, while 58% of the customers notice the flooring design in a fashion store. Provided results point out that flooring design is essential but might not be considered as one of the main interior design factors that have a major influence on the customer shopping experience.

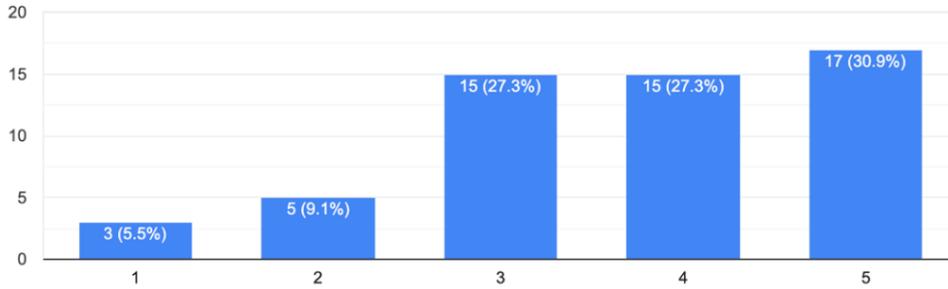


Figure 15: Customers' responses on noticing the floor of a shopping store. (Source: author)

Floor Design – Image Choice Between 2 Store Designs

Upon showing two images without context to the customers to know which floor design would affect their shopping experience positively, the Image of store A floor design has details and different colors while the image of store B, the floor design is simple with one color.



Figure 16: Store A, floor design has details. (Source: raw-edges.com)



Figure 17: Store B, floor design has details. (Source: dreamstime.com)

83.6% of the customers choose store B, while 12.7% of the customer choose store A, which shows that customers prefer floors with simple design as they will not add visual noise or distraction from products and display.

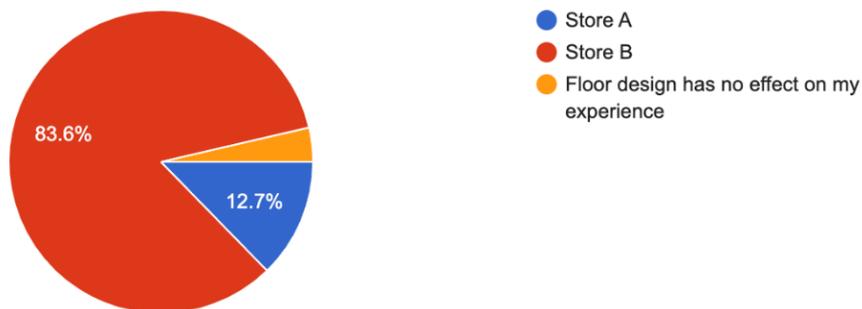


Figure 18: Customers' responses on choosing between store A, store B or that floor design has no effect on his experience. (Source: author)

Ceiling Design

The graph shows normal distribution in results when customers were asked about the effect of the ceiling on their perception of retail space. As (49.1%) of the customers see that it has a neutral effect, (25.5%) of customers see that ceiling has a high effect, and (25.5%) of customers see that it has a low effect, which means that the ceiling has no significant effect on customer experience, probably if ceiling design is odd design, it might be noticeable in a negative way.

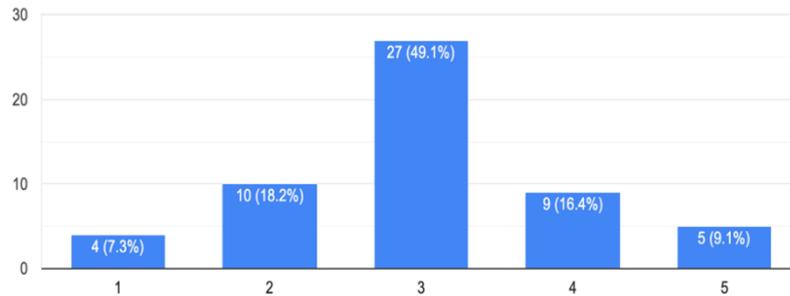


Figure 19: Customers' responses to the effect of ceiling design in a shopping store. (Source: author)

Ceiling Design – Image Choice Between 2 Store Designs

When presenting two different ceiling designs and asking which store could affect your shopping experience, (Store A) ceiling design is simple, while (Store B) ceiling has more ceiling design details, More than half of the customers (56.4%) customer prefer store A, While (27.3%) customer prefer store B, and (16.7) of the customers choose that ceiling has no effect on their experience, this results shows that ceiling design doesn't affect their shopping experience.



Figure 20: Store A, ceiling design is simple. (Source: ssilife.com)



Figure 21: Store B, ceiling has more ceiling design details. (Source: srchdaily.com)

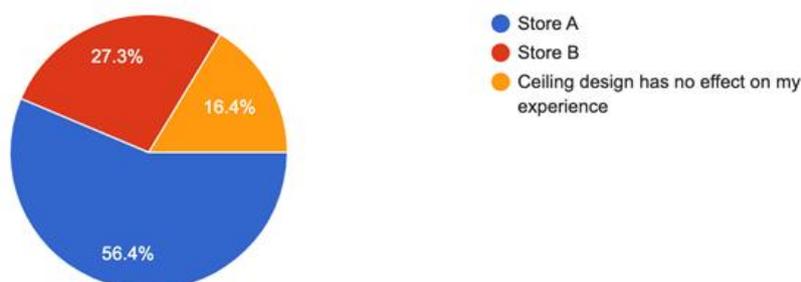


Figure 22: Customers' responses on choosing between store A, store B or that ceiling design has no effect on his experience. (Source: author)

Lighting Design

Regarding the effect of light design on customer perception in a retail store during shopping, (81.9%) see that light design has a strong effect on how customers perceive the products in a fashion store, while (14.5%) of customers see that light has a neutral effect, and (3.6%) of the customers see that it has a poor effect on their experience. This indicates that light has a strong effect on customers' shopping experience.

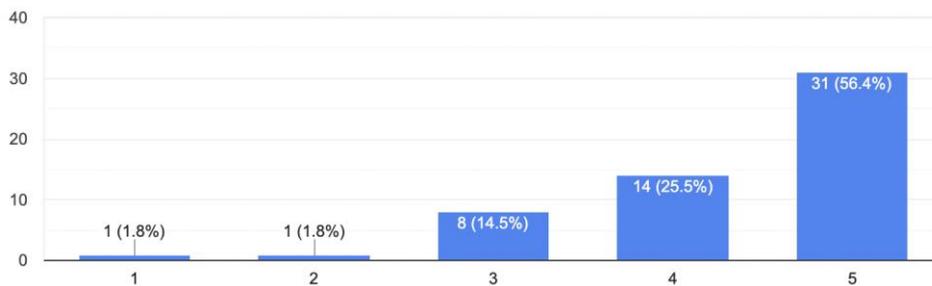


Figure 23: Customers' responses to the effect of light design on their perception in a shopping store. (Source: author)

When showing customers two different light design images and asking which store light design you prefer more, As (Store A) with neutral lighting about 5000K, And (Store B) with warm lighting about 2500K, (87.3%) of customers choose store A, while (12.7%) of customers choose store B, which indicates that customers prefer neutral lighting as it gives them better look and feels which can be translated technically into better rendering (color rendering index) as it renders the true colors of the products.

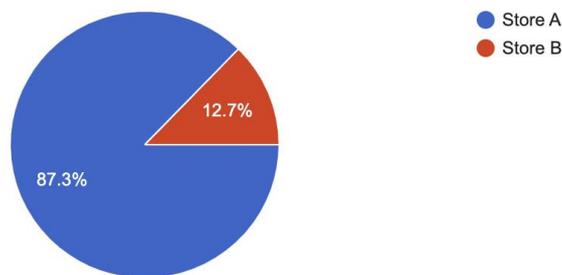


Figure 24: Customers' responses on choosing between store A, store B. (Source: author)



Figure 25: Store A, neutral lighting about 5000K. (Source:wien.info)



Figure 26: Store B, with warm lighting about 2500K. (Source: ledil.com)

Color

According to responses to the effect of colors on their perception during shopping, (61.8%) of customers responded see that light has a high effect on their shopping experiences, (34.5%) of customers' responses were neutral which is relatively understandable as it linked with the brand identity, for example, Zara stores color identity was slightly warm colors and change it to neutral colors, rebranding towards new neutral colors for improving the customers shopping experience.

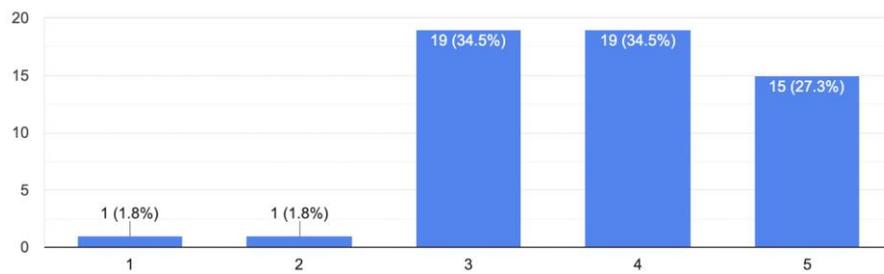


Figure 27: Customers' responses to the effect of color on their shopping experience. (Source: author)

When showing customers two different color design images in a fashion store and asking which store colors you prefer more, Store A presents a warm color mood, while Store B presents a neutral color mood, the results come with 67.3% of customers prefer neutral colors where the main focus is the products according to their feedback, while 32.7% of customers choose Store A.



Figure 28: Store A, presents a warm color mood. (Source:5starplusdesign.com)



Figure 29: Store B, presents a neutral color mood. (Source: nedap-retail.com)

In addition to the questionnaire questions, there was written feedback from the responders as well which states that the simpler the interior design, the more the products appear, In addition, the most common feedback received was about how light design, distribution, and color rendering affect their shopping experience in fashion stores.

7. CONCLUSIONS

- According to the research and survey findings, below are the study conclusions:
- The retail store environment has a significant impact on customers' perception which affect their tendency to shop in specific stores and time spent in the store which accordingly increases store sales and unplanned buying.
- During their visit, Customers do pay attention to the interior design of the store, and most of the elements play a role in their choice either to enter this store or prefer another one.

- According to the study, Light is the most important element that affects customers' perception of a fashion store, and the interior designer should use neutral lighting as it translated technically into better rendering (color rendering index) which gives better look and feel as it renders the true colors of the products.
- Circulation and display positions have a significant effect on customers as it starts by entering the store, moving in an appropriate space between displays to give the ability to see the products easily, choose which item the customer prefers, and easily find the fitting room to try the size and get the decision to buy and the whole store should be visible to the customer to build a visual map for the sections that he will move from one to another in the store.
- flooring, ceiling, color selection, has little to no major effect on customers perception when it has simple or neutral design which provides a balanced effect on customers.
- It is also noticed that odd or bold selection for flooring, ceiling, and color selection provides distracting effect on customers and affect their experience in a negative way which led to potential decrease in retail experience and sales.

8. RECOMMENDATIONS FOR FUTURE WORK

- Further research can be conducted to assess the following areas:
- Although this research used pictures of stores to evaluate certain parameters, another study may focus on evaluating customers' perception and experience through on-site visits to specific stores.
- Additional studies could be carried out to assess in detail the most significant interior design elements in retail design and propose a framework based on common practices and proved successes and proposing a checklist for interior design elements and its related aspects that should be utilized in every retail store regardless of its brand and type.

9. REFERENCES

- Abdel-Tawab, I., Al-Darwish, E. and Al-Mutaher, H. (2021). Factors affecting the sustainable development of traditional commercial urban spaces. *Journal of Engineering Research*, 5(3): 60-73.
- Abu Zaarour, R. (2013). The effect of interior design on the success of the content of internal and external spaces, "Detached residential buildings (villas) in Nablus as a model". An unpublished master's thesis in architecture at An-Najah National University, Palestine.
- Al-Fran, H. (2019). The importance of the role of interior design in enhancing the Arab cultural identity of the interior space. *Journal of Architecture, Arts and Humanities*, 4(14): 599-616.
- Billings '90, Wendy L. (1990), "Effects of Store Atmosphere on Shopping Behavior" Honors Projects.
- Boyce, P. R (2012). *Human factors in lighting*. Boca Raton, FL: CRC Press.
- DiLaura, D. L., Houser, K. W., Mistrick, R. G., Steffy, G. R. (Eds.). (2011). *The lighting handbook: Reference and application (10th ed.)*, New York, NY: The Illuminating Engineering Society of North America.
- Fahmy, I. and Abdel-Ghani, N. (2015). Functional integration between value buildings and the surrounding built environment. *Urban Research Journal*, 5(18): 71-86.
- Fleischer, S., Krueger, H., Schierz, C. (2001), Effect of brightness distribution and light colours on office staff, the 9th European Lighting Conference "Lux Europa 2001"
- Katlijn Quartier, (2009), Retail design: exploring lighting for creating experiences that influence consumers' mood and behaviour in retail spaces. 8th European Academy Of Design Conference - April 2009, The Robert Gordon University, Scotland.
- KNEZ, I., (2001). Effects of colour of light on nonvisual psychological processes. *Journal of Environmental, Psychology*, 21, pp. 201-208.

- Kuehni, R.G. (2005). Color: An Introduction to Practice and Principles, Second Edition. Canada: Wiley-Interscience.
- Lafteh, R. and Kazem, A. (2019). The footprint and its features in the design of interior spaces. Journal of the College of Basic Education, 25 (104): 673-712.
- Lechner, N. (2009). Heating, cooling, lighting: Sustainable design methods for architects. Hoboken, NJ: Wiley.
- Kaya, N., (2017), The Effects of Color on People at Retail Stores, Recent Developments in Arts, E-BWN
- Quartier, K. (2007). Retail design: Exploring atmospheric tools for creating experiences, Milan, Italy, pp. 68-82.
- Singh P., Katiyar N., Verma G.(2014), Retail Shoppability: The Impact Of Store Atmospherics & Store Layout On Consumer Buying Patterns
- Söker, B.S. (2009). The Role of Color on the Retail Spaces: Restaurant Atmospherics. Ankara: Bilkent University.
- Nicasio, F. 2021. How to Encourage Impulse Buys and Unplanned Purchases in Your Retail Store, <https://www.vendhq.com/blog/encourage-impulse-buys-store-deeper-look-unplanned-purchases/>, Last checked: 29/9/2022

10. APPENDIX

Appendix 1: Questionnaire Form

<p>Optional - Do you have additional recommendations for improving interior design and user experience in retail stores?</p> <p>Short answer text _____</p>	<p>Gender *</p> <p><input type="radio"/> Male</p> <p><input type="radio"/> Female</p>
<p>To which extent does the interior design of a fashion store affect your overall shopping experience? *</p> <p style="text-align: center;"> 1 2 3 4 5 Low <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> High </p>	<p>If two stores are selling the same product, does the overall look and feel of the store (interior design) affects your choice to pick one on top of the other? *</p> <p style="text-align: center;"> 1 2 3 4 5 Not Likely <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> More Likely </p>
<p>To which extent does the circulation and display positions inside a fashion store affects your shopping experience? *</p> <p style="text-align: center;"> 1 2 3 4 5 Poor effect <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Strong effect </p>	<p>Did you notice the flooring design of a store you enter? *</p> <p style="text-align: center;"> 1 2 3 4 5 Not Noticeable <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Noticeable </p>
<p>Which floor design would affect your shopping experience positively? *</p> <p><input type="radio"/> Store A</p>  <p><input type="radio"/> Store B</p>  <p><input type="radio"/> Floor design has no effect on my experience</p>	<p>Which ceiling design would affect your shopping experience positively? *</p> <p><input type="radio"/> Store A</p>  <p><input type="radio"/> Store B</p>  <p><input type="radio"/> Ceiling design has no effect on my experience</p>
<p>To which extent does the ceiling design affect your shopping perception of a store? *</p> <p style="text-align: center;"> 1 2 3 4 5 Low <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> High </p>	<p>To which extent does the light design affect your shopping perception of the store during the shopping? *</p> <p style="text-align: center;"> 1 2 3 4 5 Poor effect <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Strong effect </p>
<p>Which light design do you prefer in a fashion store? *</p> <p><input type="radio"/> Store A</p>  <p><input type="radio"/> Store B</p> 	<p>Which color mood do you prefer during your shopping in a fashion store? *</p> <p><input type="radio"/> Store A</p>  <p><input type="radio"/> Store B</p> 
<p>Does the colors of a store affects your shopping experience? *</p> <p style="text-align: center;"> 1 2 3 4 5 Low effect <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> High effect </p>	<p>Optional - Do you have additional recommendations for improving interior design and user experience in retail stores?</p> <p>Short answer text _____</p>